In the Specification:

AMDT A

Page 1, line 11, after "08/560,091," insert -- now Patent No. 5,805,140, --.

Page 1, line 13, after "08/756,745" insert -- now Patent No. 5,825,308, --.

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Page 12, line 2, after "08/756,745" insert -- now Patent No. 5,825,308, --.

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Page 19, line 31, after "08/736,161" insert -- now Patent No. 5,828,197, --.

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Page 33, line 22, after "08/374,288" insert -- (now Patent No. 5,731,804) --.

Page 33, line 22, after "08/400,233" insert -- (now Patent No. 5,767,839) --.

Page 33, line 22, after "08/489,068" insert -- (now Patent No. 5,721,566) --.

Page 33, line 22, after "08/560,091" insert -- (now Patent No. 5,805,140) --.

Page 33, line 22, after "08/623,660" insert -- (now Patent No. 5,691,898) --.

Page 33, line 23, after "08/736,161" insert -- (now Patent No. 5,828,197) --.

In the Claims:

Claims that have been changed by this amendment are listed below.

Please cancel claims 1-46 without prejudice.

Please add the following claims:

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47. (new) A force feedback interface device in communication with a host computer, the force feedback interface device comprising:

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at least one sensor that detects a motion or position of a manipulandum of said force feedback interface device when manipulated by a user, wherein a location of a cursor displayed by said host computer is responsive to said manipulation of said manipulandum by said user;

at least one actuator operative to output forces to a user of said force feedback interface device; and

a force functionality button provided on said force feedback interface device and manipulatable by said user, wherein said force functionality button toggles the output of a force feedback sensation by said actuator when said cursor encounters a designated graphical object or region upon a graphical display of said host computer, said toggling based on said manipulation of said force functionality button by said user.

48. (new) A force feedback interface device as recited in claim 47 wherein said force sensation is applied by said actuator when said force functionality button is depressed by said user.

49. (new) A force feedback interface device as recited in claim 48 wherein said force feedback sensation is associated with a cursor crossing a window border.

50. (new) A force feedback interface device as recited in claim 49 wherein said force sensation includes a force that resists a motion of said cursor through said window border.

51. (new) A force feedback interface device as recited in claim 47 further comprising an indexing button provided on said force feedback interface peripheral, said indexing button enabling an indexing mode when depressed by said user.

52. (new) A force feedback interface device as recited in claim 47 wherein said actuator is controlled by a local processor in response to signals received from said host computer.

53. (new) A force feedback interface device as recited in claim 48 wherein said force feedback sensation is associated with a cursor crossing a border of an icon.

54. (new) A force feedback interface device as recited in claim 53 wherein said force feedback sensation is a resistive spring force resisting motion of said cursor into said icon.

55. (new) A force feedback interface device as recited in claim 54 wherein said icon is selected by said cursor when said cursor moves into a predetermined threshold distance into said icon.

56. (new) A force feedback interface device as recited in claim 54 wherein said spring force enables an isometric control mode, wherein an amount of penetration of the mouse against the spring force controls a speed of scrolling of a document displayed by said host computer.

57. (new) A method for controlling a force feedback interface peripheral, said force feedback interface peripheral including a force functionality button, said method comprising:

providing a force feedback interface peripheral including at least one sensor and at least one actuator, said actuator operative to output forces to a user of said force feedback interface peripheral;

providing a button on said force feedback interface peripheral that can function as a force functionality button, said force functionality button manipulatable by said user;

enabling a cursor to be controlled on a host computer, the displayed location of said cursor being responsive to manipulation of a portion of said force feedback interface peripheral by said user; and

enabling said force functionality button to toggle the application of a force feedback sensation by said actuator when said cursor encounters a designated graphical object or region upon the graphical display of said host computer, said toggling based on said manipulation of said force functionality button by said user.

58. (new) A method as recited in claim 57 wherein said force sensation is applied by said actuator when said force functionality button is depressed by said user.

59. (new) A method as recited in claim 58 wherein said force feedback sensation is associated with a cursor crossing a window border.

60. (new) A method as recited in claim 59 wherein said force sensation includes a force that resists a motion of said cursor through said window border.

61. (new) A method as recited in claim 57 further comprising providing an indexing button on said force feedback interface peripheral, said indexing button enabling an indexing mode when depressed by said user.

62. (new) A method as recited in claim 57 wherein said actuator is controlled by a local processor in response to signals received from said host computer.

63. (new) A method as recited in claim 58 wherein said force feedback sensation is associated with a cursor crossing a border of an icon.

64. (new) A method as recited in claim 63 wherein said force feedback sensation is a resistive spring force resisting motion of said cursor into said icon.

65. (new) A method as recited in claim 64 wherein said icon is selected by said cursor when said cursor moves into a predetermined threshold distance into said icon.

66. (new) A method as recited in claim 64 wherein said spring force enables an isometric control mode, wherein an amount of penetration of the mouse against the spring force controls a speed of scrolling of a document displayed by said host computer.

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67. (new) A force feedback interface device in communication with a host computer, the force feedback interface device comprising:

at least one sensor that detects a motion or position of a manipulandum of said force feedback interface device when manipulated by a user, wherein a location of a cursor displayed by said host computer is responsive to said manipulation of said manipulandum by said user;

at least one actuator operative to output forces to a user of said force feedback interface device; and

a first force functionality button provided on said force feedback interface device and manipulatable by said user, wherein manipulation of said first force functionality button by said user causes a first force functionality mode of said force feedback interface device to be active, wherein a force feedback sensation is output by said actuator when said cursor encounters a designated graphical object or region upon a graphical display of said host computer when said first force functionality mode is active; and

a second force functionality button provided on said force feedback interface device and manipulatable by said user, wherein manipulation of said second force functionality button by said user causes a second force functionality mode of said force feedback interface device to be active which is different from said first force functionality mode, wherein a force feedback sensation is output by said actuator when said cursor encounters a designated graphical object or region upon a graphical display of said host computer when said second force functionality mode is active.

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68. (new) A force feedback interface device as recited in claim 67 wherein said first force functionality mode is a pressure scrolling mode, wherein a spring force is output on said manipulandum opposing the movement of said cursor through a border of said designated graphical object or region, and wherein a rate of scrolling of an object is controlled by an amount of said movement of said cursor.

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69. (new) A force feedback interface device as recited in claim 67 wherein said first force functionality mode is a pressure clicking mode, wherein a spring force is output on said manipulandum opposing the movement of said cursor through a border of said designated graphical object or region, and wherein said designated graphical object or region is selected by said cursor when said cursor moves into a predetermined threshold distance into said designated graphical object or region.

70. (new) A force feedback interface device as recited in claim 67 wherein

said first force functionality mode is a pressure scrolling mode, wherein a spring force is output on said manipulandum opposing the movement of said cursor through a border of said designated graphical object or region, and wherein a rate of scrolling of an object is controlled by an amount of said movement of said cursor; and

said second force functionality mode is a pressure clicking mode, wherein a spring force is output on said manipulandum opposing the movement of said cursor through a border of said designated graphical object or region, and wherein said designated graphical object or region is selected by said cursor when said cursor moves into a predetermined threshold distance into said designated graphical object or region.

71. (new) A force feedback interface device as recited in claim 68 wherein said designated graphical object or region is a window.

72. (new) A force feedback interface device as recited in claim 68 wherein said designated graphical object or region is an icon.